

Application No. 10/015,534
Attorney Docket No. P-011-RC2
Customer No. 27038
Page 2 of 8

II. LISTING OF CLAIMS

1-35. (Canceled)

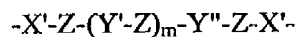
36. (Previously Presented) A method of preparing a library of compounds of the formula:



wherein

each L is independently a ligand which binds to a cellular receptor; and

X is a linker of the formula:



wherein

m is an integer of from 0 to 20;

X' at each separate occurrence is selected from the group consisting of $-O-$, $-S-$, $-NH-$, $-C(O)-$, $-C(O)O-$, $-C(O)NH-$ and a covalent bond;

Z at each separate occurrence is selected from the group consisting of alkylene, cycloalkylene, alkenylene, alkynylene, arylene, heteroarylene, heterocyclene and a covalent bond;

Y' and Y'' at each separate occurrence are selected from the group consisting of $-C(O)NR'-$, $-NR'C(O)-$, $-NR'C(O)NR'-$, $-C(=NR')-NR'-$, $-NR'-C(=NR')-$, $-NR'-C(O)-O-$, $-P(O)(OR')-O-$, $-S(O)_nCR'R''-$, $-S(O)_n-NR'-$, $-S-S-$ and a covalent bond; where n is 0, 1 or 2; and

R' and R'' at each separate occurrence are selected from the group consisting of hydrogen, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, aryl, heteroaryl and heterocyclic;

the method comprising the steps of:

- (a) identifying a ligand compound which binds to a cellular receptor;
- (b) providing a plurality of functionalized ligand compounds, each functionalized ligand compound comprising the ligand compound from step (a) having a reactive functional group selected

Application No. 10/015,534
Attorney Docket No. P-011-RC2
Customer No. 27038
Page 3 of 8

from the group consisting of an $-NH_2$, $COOH$, $C(O)Y$, CHO , OH , SH , $N=C=O$ and Y group, where Y is halo; wherein the reactive functional group of each functionalized ligand compound is located at a different position relative to the other functionalized ligand compounds;

(c) providing a linker compound comprising two reactive functional groups independently selected from the group consisting of an $-NH_2$, $-COOH$, $-C(O)Y$, $-CHO$, $-OH$, $-SH$, $-N=C=O$ and $-Y$ group, where Y is halo; wherein each of the reactive function groups of the linker compound has complementary reactivity to the reactive functional group of a functionalized ligand compound from step (b);

(d) reacting the linker compound from step (c) with each of the functionalized ligand compounds from step (b) to provide a library of compounds of the formula $L-X-L$.

37. (Previously Presented) The method of Claim 36, wherein the method further comprises the step of:

(e) assaying each compound of the library from step (d) to determine its affinity for the cellular receptor.

38. (Previously Presented) The method of Claim 36, wherein the linker compound has a chain length between reactive functional groups of from about 2 Å to 100 Å.

39. (Previously Presented) The method of Claim 36, wherein the cellular receptor is a G-protein coupled receptor.

40. (Previously Presented) The method of Claim 39, wherein the cellular receptor is a muscarinic receptor.